

Work Order ID 62810

Friday, October 08, 2010 10:38:27 AM



Page 1

Item ID:	D4146-1	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Fitting					
Start Date:	10/8/2010	Start Qty:	4.00			
Required Date:	10/15/2010	Req'd Qty:	4.00			
Reference:						

Approvals:	Process Plan:		Date:	10/10/08	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4146	A

100		0.00
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Doosan
Doosan Lathe

Memo
TURN AS PER DWG AND FOLIO FA976
FOLIO REV: N/A
DWG REV: 1

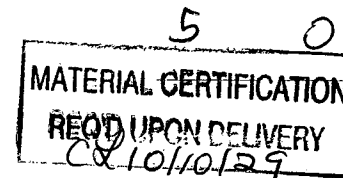
DEBURR

110	QC2- Inspect parts off machine FAI/FAIB	0.00
-----	---	------



QC
Quality Control

Memo



J.F.S. 10/10/29

5 0 J.F.S. 10/10/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62810

Friday, October 08, 2010 10:38:27 AM



Page 2

Item ID: D4146-1

Accept



Setup Start



Revision ID:

Item Name: Fitting

Stop



Start Date: 10/8/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 10/15/2010 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

Joe 10.10.29

(5)

130

Identify as per dwg & Stock Location: *133*

0.00



Packaging

Memo

0.00

Packaging

10.10.29

(5)

10/11/01 (5)

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10.10.29

MF 10-11-01

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, October 08, 2010 10:38:31 AM

Page 1

Work Order ID: 62810

Parent Item: D4146-1

Parent Item Name: Fitting




Start Date: 10/8/2010

Required Date: 10/15/2010

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 10-10-05 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R1.000  303 Round Bar 1.00		Purchased	No			100	f	28.0560	0.1666	0.701474			



J.F.S. 10/10/29

Location

Loc Qty

Loc Code

MAT

24

115774

24

MAT028

4.056

113325

4.056

0.876842

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 62810
Description: Fitting		Part Number: D4146-1
Inspection Dwg: D4146 Rev: A		Page 1 of 1

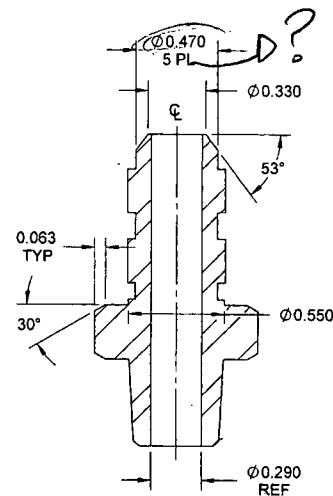
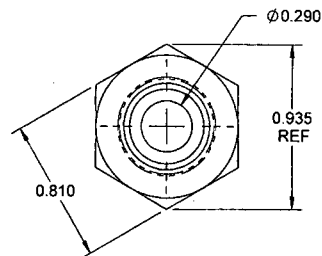
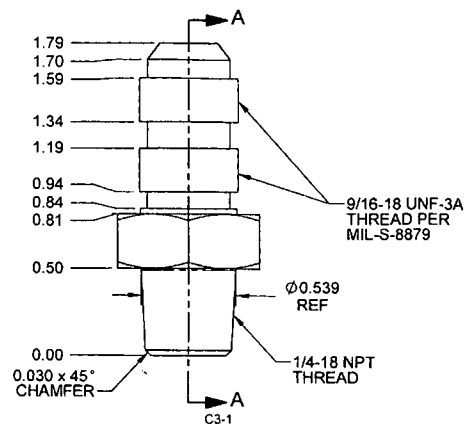
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø 0,290"		Ø 0,293"	✓		vern.	J.F. - 05
0,810"	+/- ,010"	0,810"	✓		" "	" "
Ø 0,550"	+/- ,010"	Ø 0,556"	✓		" "	" "
Ø 0,470"	+/- ,010"	Ø 0,469"	✓		" "	" "
Ø 0,330"	+/- ,010"	Ø 0,340"	✓		" "	" "
0,063"	+/- ,010"	Ø 0,055"	✓		" "	" "
1,79"	+/- ,030"	1,792"	✓		" "	" "
1,70"	+/- ,030"	1,708"	✓		" "	" "
1,59"	+/- ,030"	1,591"	✓		" "	" "
1,19"	+/- ,030"	1,197"	✓		" "	" "
0,84"	+/- ,030"	0,847"	✓		" "	" "
0,81"	+/- ,030"	0,819"	✓		" "	" "
0,50"	+/- ,030"	0,504"	✓		" "	" "
Ø 0,539"	+/- ,010"	Ø 0,535"	✓		" "	" "
9/16"-18 UNF-3A	N/A	9/16"-18	✓		Fillet Gage	
M.O.W.	Max: 0,574 Min: 0,571	0,574"	✓		Micro	J.F. - 01
Major. Ø	Max: 0,562 Min: 0,554	Ø 0,558"	✓		" "	J.F. - 01
1/4" NPT	N/A	1/4" NPT	✓		Fillet Gage	
Handtight Engag.	+/- 1 Turn	0,236"	✓		Vern.	J.F. - 05
0,2285						

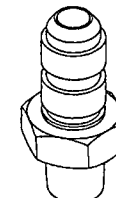
Measured by: J.F.S.	Audited by:	Preliminary Approval:
Date: 10/10/29	Date: 10-10-29	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15



SECTION A-A C5-1



SHOP COPY
RECEIVED
ENGINEERING
UNCONTROLLED COPY
SUBJECT:
V. C. G. ORDER
NO. 42810

RELEASED
2010-09-23
JMP

D4146-1 FITTING

- NOTES:**
1) MATERIAL: AISI 303 STAINLESS STEEL HEX BAR OR
AISI 303 STAINLESS STEEL ROUND BAR
DART SPEC. M303H OR M303R
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER QSI 044 6.1
7) WEIGHT: 0.11 lbs

A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	<i>RF</i>		
MFG. APPR.	<i>RF</i>		
APPROVED	<i>RF</i>		
DE APPR.	<i>RF</i>		
DATE	10.09.16		

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

DRAWING NO.
D4146

REV. A
SHEET 1 OF 1

TITLE
FITTING

SCALE
NTS

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NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Receiving Report

Date: 1/5/28

Batch No: M115777

Supplier: MAGNA

Dart P/O: 12546

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection ☒ N/A ☐
 Work Order 1060128 N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12

Production/Admin:
 Date: 1/9/28
 Received/Costing:
 Initial:

Location

Purchase Order Receipt Listing

Page 1 of 1

Tuesday, September 28, 2010 9:54:05 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO12546 Receipt Dates from 9/28/2010 to 9/28/2010 All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VC-MAG002	Magna Stainless								
PO12546	I		M303R1.000	f	9/15/2010	9/28/2010	24.0000	\$6.67	0.0000	0	\$160.00
CAD	No		303 Round Bar 1.00	f	24.0000	DESJ02		\$160.00	0.0000	0	
			115774								
Total Received Quantity:											24.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$160.00
Total Balance Due Quantity:											0.0000

2x



Magna Stainless

5775 Kieran St, Saint-Laurent, Quebec H4S 0A3
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105



PACKING LIST

Page 1 of 1

I032914

SOLD TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7



MTR:Y

SPECIAL INSTRUCTIONS

****STOCK****

Contact: CHANTAL

Ship Terms: PREPAID

Currency		Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS		DAVE MC VETY	(613) 632-5200	(613) 632-1053	12546	
Sales Order	Terms		Ship Via	Date Ordered	Date Required	Date Shipped
W036086	NET 30 DAYS		NIR:R-557065-1	09/27/10	09/28/10	09/28/10

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
2		PC	STAINLESS ROUNDS SRB 303 1" x R/L 12' 66 LB / 2 PC <i>C. 10/2/20</i>	L043161	7HR9	2
Bundles: 1				Approx	Weight:	66 LB

Received by: _____ Date: _____ Signature: _____



METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS
6870 HIGHWAY 42 EAST
GHENT, KY 41045

015384

6870 HIGHWAY 42 EAST

Certificate: 587934 15

Mail To:

MAGNA STAINLESS

Customer: 007420 001

5775 KIERAN STREET
SAINT LAURENT, QC H4S0A3

Ship To:

MAGNA STAINLESS

5775 KIERAN STREET

SAINT LAURENT, QC H4S0A3

Date: 9/23/2010 Page: 1

Steel: 303

Finish: ST

Your Order: P011558

NAS Order: IN 0102414 08

Corrosion:

PRODUCT DESCRIPTION:

Round Bar, Annealed, Smooth Turned, Cold Finished

ASTM A582/05 EN 10204 3.1, ASTM A484/08

AMS 5640U TYPE 1, QQS-764B CONDITION A

REMARKS:

COMPLIES W/REQUIREMENTS OF DFARS EU DIRECTIVE 2002.95.

EC. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG IN USA

FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Subsize

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BD2487 6		1.0000		452	144.00	11	1	

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

HEAT	CM	C	CO	CR	CU	MN	MO	N	NI	P
7HR9	US	.0545	.1940	17.7785	.4260	1.7875	.2525	.0511	8.5545	.0285
		S	SI							
		.3575	.4110							

MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BD2487 6	R L	172.00	78.91	104.33	40.96	34.36

NAS hereby certifies that the analysis on this certification is correct and the material meets the specifications stated.

QC ENGINEER

ERIC HESS

9/23/2010



METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS
6870 HIGHWAY 42 EAST
GHENT, KY 41045

6870 HIGHWAY 42 EAST

Certificate: 587934 16

Mail To:

MAGNA STAINLESS
5775 KIERAN STREET
SAINT LAURENT, QC H4S0A3

Ship To:

MAGNA STAINLESS
5775 KIERAN STREET
SAINT LAURENT, QC H4S0A3

Date: 9/23/2010 Page: 1

Customer: 007420 001

Steel: 303

Finish: ST

Your Order: P011558

NAS Order: IN 0102414 08

Corrosion:

PRODUCT DESCRIPTION:

Round Bar, Annealed, Smooth Turned, Cold Finished
ASTM A582/05 EN 10204 3.1, ASTM A484/08
AMS 5640U TYPE 1, QQS-764B CONDITION A

REMARKS:

COMPLIES W/REQUIREMENTS OF DFARS EU DIRECTIVE 2002.95.
EC. ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG IN USA
FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BD2497 1		1.0000		678	144.00	12	1	

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

HEAT	CM	C	CO	CR	CU	MN	MO	N	NI	P
7HR9	US	.0545	.1940	17.7785	.4260	1.7875	.2525	.0511	8.5545	.0285
		S	SI							
		.3575	.4110							

MECHANICAL PROPERTIES

Product Id	1 d	o i	HB	.2YS	UTS	RA	Elong
		c r	No.	KSI	KSI	%	% 4D
BD2497 1	R L		172.00	78.91	104.33	40.96	34.36

NAS hereby certifies that the analysis on this certification is correct and the material meets the specifications stated.

QC ENGINEER

ERIC HESS

9/23/2010

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577

OUTSTANDING PO REPRINT

Purchase Order ID PO12546

Purchase Order Date 9/10/2010

PO Print Date 9/28/2010

Page Number 1 of 1

Order From :

VC-MAG002

MAGNA STAINLESS
5775 RUE KIERAN
ST LAURENT, QC H4S 0A3
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	800 363 6646	Requisition Nbr	
Vendor Fax	514 339 1105	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Unit Price	Extended Price
----------	--	------------------------	----------------------	---------	------------	----------------

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M303R1.000	303 Round Bar 1.00	9/15/2010 Yes	✓ 24.00 f	Yours ppd	\$6.6667	\$160.00

REFERENCE ONLY

Special Inst: MATERIAL: 303 SS ROUND BAR
NOTE: AISI 304/316 NOT
ACCEPTABLE

Line Total: \$160.00

Outstanding PO Total: \$160.00

Change Nbr: 1

Change Date: 9/10/2010

CL No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable